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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,451	01/02/2002	Tae-myun Kim	1293.1276	6584
21171	7590	08/18/2005	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			HOEL, MATTHEW D	
			ART UNIT	PAPER NUMBER
			3713	

DATE MAILED: 08/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/032,451

Applicant(s)

KIM ET AL.

Examiner

Matthew D. Hoel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 07/27/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
2. A person shall be entitled to a patent unless –
3. the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
4. Claims 1 to 7 are rejected under 35 U.S.C. 102(a) as being anticipated by Masao (Japanese patent publication 2001-006252, application 11-177480).
5. As to Claim 1: Masao teaches a roulette with a gear provided thereon which holds a plurality of discs. The roulette (43, Fig. 3) holds five discs. The roulette has a gear (76, Fig. 7) provided on its bottom surface. Paragraph 15 of Masao states: "A gear 76 forms a ring-like step in the **inferior surface** of tongue of said rotation tray 43, and forms a gear slot in the inner circumference of the step of the shape of this ring" (emphasis added by examiner). The translation used by the examiner for Masao for this office action is the machine translation provided by JPO and NCIP, entered into the record on March 3rd, 2005. The alternative translation by Schreiber Translations, Inc., entered into the record on March 15th, 2005, indicates the same thing (Paragraph 15, Pages 37 and 38). Fig. 7 of Masao shows a motor 73 with a rotation shaft 81. There is a worm gear (82, Fig. 7, referred to as "worm" by Masao, Paragraph 30) installed on the rotation shaft of the motor. Masao in Paragraph 30 teaches a gear 83 fixed to a "worm gear" 74. 83 and 74 are permanently fixed to each other and do not move relative to

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each other, therefore they constitute a single driving gear. This is the same as the driving gear 430 of Figs. 3 and 4 of the application. One set of teeth on gear 430 meshes with the gear 210 on roulette 200; the other set of teeth meshes with the worm gear 420. The driving gear of Masao (83 and 74) is directly coupled to both the worm gear 82 and the gear 76 provided on the bottom surface of the roulette, and it transmits power from the motor to the roulette.

6. As to Claim 2: In Paragraph 1 (Field of the Invention), Masao states that the unit can play and record optical disks. Paragraphs 2 and 3 describe the operation of a typical CD changer to which the improvement of Masao is made. Motor 73 turns roulette 43; rotary switch 105 detects the exact position of the roulette, allowing the player to select the exact disc (Paragraph 38).

7. As to Claim 3: Masao teaches a roulette with a gear provided thereon which holds a plurality of discs. The roulette (43, Fig. 3) holds five discs. The roulette has a gear (76, Fig. 7) provided on its bottom surface (Paragraph 15: "A gear 76 forms a ring-like step in the inferior surface of tongue of said rotation tray 43, and forms a gear slot in the inner circumference of the step of the shape of this ring."). Fig. 7 of Masao shows a motor 73 with a rotation shaft 81. There is a worm gear (82, Fig. 7, referred to as "worm" by Masao, Paragraph 30) installed on the rotation shaft of the motor. Masao in Paragraph 30 teaches a gear 83 fixed to a worm gear 74. 83 and 74 are permanently fixed to each other and do not move relative to each other, so they constitute a single driving gear for all practical purposes. The driving gear (83 and 74) is directly coupled

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to both the worm gear 82 and the gear 76 provided on the bottom surface of the roulette, and it transmits power from the motor to the roulette.

8. As to Claim 4: Masao teaches a roulette with a gear provided thereon which holds a plurality of discs. The roulette (43, Fig. 3) holds five discs. The roulette has a gear (76, Fig. 7) provided on its bottom surface (Paragraph 15: "A gear 76 forms a ring-like step in the inferior surface of tongue of said rotation tray 43, and forms a gear slot in the inner circumference of the step of the shape of this ring."). Fig. 7 of Masao shows a motor 73 with a rotation shaft 81. There is a worm gear (82, Fig. 7, referred to as "worm" by Masao, Paragraph 30) installed on the rotation shaft of the motor. Masao in Paragraph 30 teaches a gear 83 fixed to a worm gear 74. 83 and 74 are permanently fixed to each other and do not move relative to each other, so they constitute a single driving gear for all practical purposes. The driving gear (83 and 74) is directly coupled to both the worm gear 82 and the gear 76 provided on the bottom surface of the roulette, and it transmits power from the motor to the roulette.

9. As to Claim 5: In Paragraph 1 (Field of the Invention), Masao states that the unit can play and record optical disks. Paragraphs 2 and 3 describe the operation of a typical CD changer to which the improvement of Masao is made. Motor 73 turns roulette 43; rotary switch 105 detects the exact position of the roulette, allowing the player to select the exact disc (Paragraph 38).

10. As to Claim 6: In Paragraph 1 (Field of the Invention), Masao states that the unit can play and record optical disks. Masao teaches a roulette with a gear provided thereon which holds a plurality of discs. The roulette (43, Fig. 3) holds five discs. The

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roulette has a gear (76, Fig. 7) provided on its bottom surface (Paragraph 15: "A gear 76 forms a ring-like step in the inferior surface of tongue of said rotation tray 43, and forms a gear slot in the inner circumference of the step of the shape of this ring."). Fig. 7 of Masao shows a motor 73 with a rotation shaft 81. There is a worm gear (82, Fig. 7, referred to as "worm" by Masao, Paragraph 30) installed on the rotation shaft of the motor. Masao in Paragraph 30 teaches a gear 83 fixed to a worm gear 74. 83 and 74 are permanently fixed to each other and do not move relative to each other, so they constitute a single driving gear. The driving gear (83 and 74) is directly coupled to both the worm gear 82 and the gear 76 provided on the bottom surface of the roulette, and it transmits power from the motor to the roulette.

11. As to Claim 7: In Paragraph 1 (Field of the Invention), Masao states that the unit can play and record optical disks. Paragraphs 2 and 3 describe the operation of a typical CD changer to which the improvement of Masao is made. Motor 73 turns roulette 43; rotary switch 105 detects the exact position of the roulette, allowing the player to select the exact disc (Paragraph 38).

Continued Examination Under 37 CFR 1.114

12. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 1st,

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2005 has been entered. In an office action entered on March 3rd, 2005, examiner Michael O'Neill rejected Claims 1 to 7 as being anticipated by Masao, and made the rejection final. The applicant submitted a response to the rejection and amended Claims 1, 4, and 6 on July 1st, 2005. On July 14th, 2005, Michael O'Neill submitted an Advisory Action Before the Filing of an Appeal Brief stating that the amended claims would not be entered stating that the amended claims were not earlier presented for consideration on their merits, and that they would require a new determination of obvious and further search of the prior art. The applicant filed a Request for Continued Examination on July 27th, 2005.

Response to Arguments

13. The present examiner has considered the applicant's response to Michael O'Neill's final rejection of Claims 1 to 7, but does not find it persuasive, and respectfully disagrees with the applicant as to the invention's patentability. The applicant has amended Claims 1, 4, and 6 to recite: ". . . wherein the gear provided on the roulette is provided on a bottom surface of a roulette. . . ." The examiner agrees that Paragraph 14 of the Specification supports this claim. The claims, however, are still not patentable over Masao. The roulette of Masao (43, Fig. 3) has a gear (76, Fig. 7) provided on its bottom surface. Paragraph 15 of Masao states: "A gear 76 forms a ring-like step in the **inferior surface** of tongue of said rotation tray 43, and forms a gear slot in the inner circumference of the step of the shape of this ring" (emphasis added by examiner). Webster's II, New Riverside University Dictionary (Houghton Mifflin, Boston, Mass.)

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defines inferior as "situated under or beneath." The applicant states that Masao discloses the gear on the inside periphery of the rotating tray (roulette). Fig. 4 of the application is almost identical to Fig. 7 of Masao. Both figures show a driving gear with its teeth meshed with the teeth of a gear on the inside periphery of the roulette. In Masao, Fig. 7, the circle formed by the driving gear 83 is internally tangential to the circle formed by the gear 76. In Fig. 4 of the application, the circle formed by the driving gear 430 is internally tangential to the circle formed by the gear 210. Judging from the figures in both applications, the diameters of the gear 76 of Masao and gear 210 of the application are about half of the diameter of the roulette in each case. The applicant has failed to show how his mechanism is patentable over that of Masao.

Citation of Pertinent Prior Art

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In U.S. patent 5,193,079, Ko, et al. teach a compact disk changer. In U.S. patent 5,513,157, Saito, et al. teach a loading apparatus for a recording medium and a method for controlling the same. In U.S. patent 5,563,857, Park teaches a disc changer having a single driving motor for both a tray and a roulette.

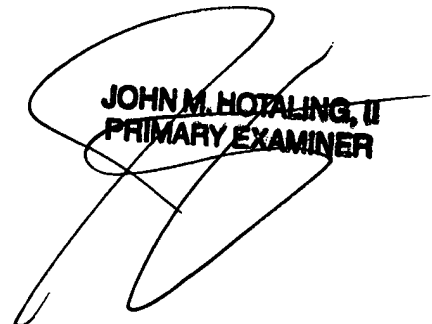
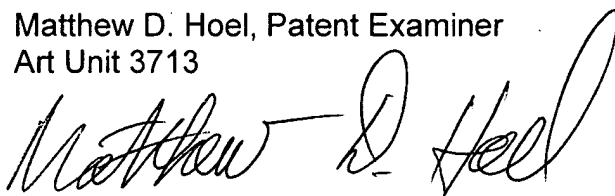
Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Hoel whose telephone number is (571) 272-5961. The examiner can normally be reached on Mon. to Fri., 8:00 A.M. to 4:30 P.M..

16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan M. Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew D. Hoel, Patent Examiner
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JOHN M. HOTELLING, II
PRIMARY EXAMINER